

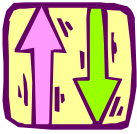
APPENDIX F - FUNDING OPPORTUNITIES

FEDERAL FUNDING (SOURCE: ADAPTED FROM MATERIAL PROVIDED BY ITS AMERICA)

The Transportation Equity Act for the 21st Century was passed by congress and was signed by President Clinton on June 9, 1998. Current calculations put the new law's funding totals at \$217.5 billion over six years (fiscal years 1998 to 2003). By comparison, ISTEA authorized some \$155 billion over six years. TEA 21 achieves a 90.5% return to each state on receipts into the Highway Trust Fund. Average annual spending will reach just under \$26 billion across all programs.

Of the \$217.5 billion total, some \$198 billion is "guaranteed" for highway and transit spending. That is, receipts from the federal gas tax into the Highway Trust Fund are guaranteed to be spent only on transportation. No longer will the amounts collected in the trust fund be available to offset other parts of the federal budget. Within the guaranteed spending category, highways will receive some \$157 billion, transit roughly \$36 billion, another \$4.4 billion to highway programs not subject to annual obligation ceilings, and over \$2 billion for highway safety programs. Additional authorizations for the highway and transit programs reach the total of \$217.5 billion but are subject to the annual appropriations process.

TEA-21 also reauthorized the federal ITS program. (The ITS provisions appear in subtitle B in Title V.) The bill provides overall funding for the ITS program of \$1.28 billion from 1998 to 2003. As proposed by FHWA and ITS America, TEA-21 allocates spending across two broad categories: (1) ITS standards, research, and operational tests funded at \$95 million to \$110 million annually; and (2) ITS deployment funded at \$101 million to \$122 million per year. Throughout TEA-21, there are also some 40 special ITS-related earmarks totaling between \$210 million and \$275 million over the six years of the bill.



One of the major changes brought about by TEA-21 was to "mainstream" the ITS program into the traditional federal-aid highway categories. These changes mark a significant departure from ISTEA, which limited funding to the federal ITS program managed by the Federal Highway Administration. While the available funding pool has grown significantly, ITS projects and the government entities and companies behind them must now compete for this new funding with more traditional transportation programs, projects and players. The intent of these and other changes is to make ITS an "everyday" tool for state and local transportation authorities that can be supported by a variety of funding mechanisms.

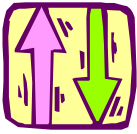
What follows is a description of the several programs and provisions that, because of changes found in TEA 21, increase the available funding for ITS separate and in addition to the discrete federal program administered by the Federal Highway Administration. This summary takes into account the technical corrections bill, "TEA 21 Restoration Act" (H.R. 3978).

Title I Federal-Aid Highways

Section 1106 Federal-Aid Systems. TEA 21 makes a change to the list of eligible projects for National Highway System, or NHS, funding. The NHS program is one of the four block-grant programs through which the states receive Highway Trust Fund revenues based on a complicated formula. TEA 21 provides over \$28.5 billion to the states under the NHS program. In section 1106 of TEA 21, "infrastructure-based intelligent system capital improvements" are added as eligible projects for NHS funding (new item O to 23 USC section 103(b)(6)). It should also be noted that TEA 21 continues from ISTEA as eligible projects under NHS "capital and operating costs for traffic monitoring, management, and control facilities and programs" (new item H of section 103(b)(6).)

Section 1108 Surface Transportation Program. This program, commonly known as STP, is the largest of the four large highway programs of Highway Trust Fund revenues. Overall, TEA 21 provides \$33 billion that may be used by states and local governments for projects on any federal-aid highway. TEA 21 changes current law -- new item 13 to 23 USC section 133(b) -- to include "infrastructure-based intelligent transportation system capital improvements" as eligible projects. As under NHS, TEA 21 continues the funding eligibility under STP of "capital and operating costs for traffic monitoring, management, and control facilities and programs" from ISTEA (23 USC section 133(b)(8)).

Section 1110 Congestion Mitigation and Air Quality Improvement Program. Otherwise known as CMAQ, this program will receive a 35% boost in funding over ISTEA levels to a total just over \$8 billion in TEA 21. Under the National Highway System Designation Act of 1995



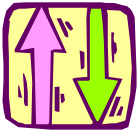
(P.L. 104-59), the CMAQ program was amended to include as eligible projects the establishment or operation of a traffic monitoring, management, and control facility or program if the facility or program would improve air quality (23 USC section 149(b)(4)).

In addition, a new provision was included in TEA 21 whereby ITS-related projects may be eligible for CMAQ funding if the program or project improves traffic flow, including projects to improve signalization, construct high occupancy vehicle lanes, improve intersections, and implement intelligent transportation system strategies and such other projects that are eligible for assistance under [the CMAQ program] on the day before the date of enactment of this paragraph. (TEA 21, section 1110(b)(6).). That is, the ITS-related project described above must have otherwise qualified for CMAQ funding any time prior to TEA 21 becoming law in order to receive such funding.

Definitions under Federal-Aid Highway Programs (Section 1201). TEA-21 did not change the definition of "operational improvement" under the federal-aid highway capital programs, as had been proposed, to include the operation or maintenance of certain ITS systems, such as for communications systems, roadway weather information and prediction systems, and the like. As passed in ISTEA, the definition of "operational improvement" already included costs associated with capital improvements to install -- but not operate or maintain -- traffic surveillance and control equipment, computerized signal systems, motorist information systems, etc. US DOT and ITS America had advocated the expanded definition of "operational improvement" for TEA 21, but it was not included in the final bill. (Section 1201(a)(18) retains the definition from ISTEA.)

However, under section 1201 a new term and definition was added for "operating costs for traffic monitoring, management, and control." In section 1201(a)(17), this term is defined as: including labor costs, administrative costs, costs of utilities and rent, and other costs associated with the continuous operation of traffic control, such as integrated traffic control systems, incident management programs, and traffic control centers. How the inclusion of this new definition will affect the availability of new funding for ITS-related operating costs remains to be seen.

Sections 1118 and 1119 National Corridor Planning and Development Program and Coordinated Border Infrastructure Program. These two programs are new in TEA 21. In response to NAFTA, Congress established the National Corridors Program to help plan, design and construct economic and trade corridors of national significance in order to improve the flow of commercial traffic. Similarly, the Border Infrastructure Program is designed to improve the flow of people and goods across international borders.



Both programs are discretionary to the Federal Highway Administration with funding totaling together \$700 million over six years. Although only the Border Crossing Program specifically includes ITS applications as eligible for funding, ITS-related technologies will figure prominently in both programs. Subsection 1119(b)(3) for the Border Crossing Program includes as eligible for funding: "operational improvements, including improvements to electronic data interchange and use of telecommunications, to expedite cross border vehicle and cargo movement."

Section 1216 Innovative Surface Transportation Financing Methods. Subsection (a) amends the Congestion Pricing Pilot Program, now to be called the Value Pricing Pilot Program, created under ISTEA. The most significant change is that the number of potential toll projects under this program is increased from three to 15. In addition, the program provides that vehicles with fewer than two occupants may operate in HOV lanes as part of a value pricing program.

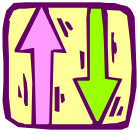
Subtitle E Finance (sections 1501 - 1504). TEA 21 establishes a new innovative finance program called the "Transportation Infrastructure Finance and Innovation Act of 1998" (or TIFIA) that permits the Department of Transportation to provide financial assistance to projects in the form of direct loans, loan guarantees and lines of credit. Almost all types of transportation projects are eligible for TIFIA assistance if the project size is at least \$100 million (or 50% of a state's annual apportionment of federal-aid funds). In addition, a project must have the potential to be self-supporting from user fees or other non-federal funding sources. In total, some \$530 million is provided in contract authority for TIFIA.

Included in TIFIA is a provision lowering the minimum project size from \$100 million to \$30 million for ITS-related projects. (Subsection 182(a)(3)(B) of TIFIA) As the Conference Committee wrote, the rationale for reducing the minimum cost stems from the "substantial capacity enhancements attainable [from ITS] with but a limited investment."

Title III Federal Transit Administration Programs

Overall, transit programs will receive under TEA 21 some \$41 billion in federal funding, of which approximately \$36 billion is "guaranteed" funding behind the budgetary "firewall" created by Congress in this bill. Under section 3003, the definition of "capital project" is amended to include "transit-related intelligent transportation systems" (amending current 49 USC section 5301(a)(1)(A)).

This change in definition will make it possible for transit agencies and authorities to use formula and other block grant funding from the Federal Transit Administration, for the wide variety of



ITS-related capital expenditures: e.g., purchases of buses equipped with ITS-related equipment, purchases of computers and software, engineering and construction, system integration, and the like. More specifically, ITS capital-related costs will be eligible under the transit formula funding program to all urbanized areas and certain rural areas (some \$2.8 billion to \$3.8 billion annually). Moreover, so-called "Section Three" programs for new rail starts, rail modernization and discretionary bus programs (some \$2.2 billion to \$3 billion annually) will now be able to fund ITS-related capital costs.

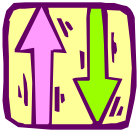
There is still the outstanding question of whether ITS-related operating and maintenance costs will be eligible for funding under TEA 21. Traditionally, the federal transit program covers operating and maintenance costs only for urban areas of less than 200,000 people; larger urban areas receive no federal funding for these expenses. TEA 21 did not clarify whether operating and maintenance costs, called "preventive maintenance" in the transit title, will now include these costs associated with ITS projects. Federal Transit Administration clarification

Other Provisions

National Architecture and Standards (5206) Like its predecessor, TEA 21 continues the emphasis on the development of the national architecture and standards for ITS applications. Funding for this activity comes from the general research money. Tea 21 offers three general provisions: (1) US DOT is directed to "develop, implement and maintain" a national architecture and standards for ITS; (2) the national architecture shall promote ITS interoperability and efficiency; and (3) standards-setting organizations may be used as appropriate.

More significantly, however, TEA 21 requires additional actions by US DOT to identify critical standards and then ties federal funding for ITS projects to adherence to those standards. First, by June 1, 1999, US DOT is to submit a report to Congress that identifies and gives the status of standards that are "critical to ensuring national interoperability" or the development of other standards. Second, US DOT is empowered to establish "provisional" standards if, by January 1, 2001, any such critical standards are not adopted and published by the appropriate standards development organizations. On this latter point, US DOT must first assess whether the development of a critical standard or standards "jeopardizes the timely achievement" of the general goals of establishing a national architecture and standards for ITS. Upon such a finding, US DOT is required to establish a provisional standard or standards. US DOT can waive the provisional standards requirement under certain conditions.

Tea 21 goes on to require that all federal funds -- that is, all funds from the Highway Trust Fund under any program -- for ITS projects must conform to the national architecture and all standards



or provisional standards developed under the ITS subtitle. Again, US DOT may waive this requirement under certain conditions for research programs and ITS legacy systems.

Last, TEA 21 addresses the allocation of frequency spectrum for ITS purposes. Generally speaking, the Federal Communications Commission (FCC) must consider frequency needs for DSRC and other ITS purposes. More specifically, however, the FCC is directed to complete a rulemaking on allocating spectrum for ITS purposes no later than January 1, 2000. Note: Without saying so, this last point refers to the current ITS America petition before the FCC for spectrum allocation at the 5.8 Ghz Band.

Research and Development (5207) TEA 21 contains a comprehensive ITS research, development, operational test and demonstration program for intelligent vehicles and intelligent infrastructure systems. The program is to give priority for federal funding across five areas:

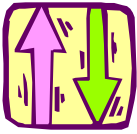
1. traffic management, toll collection, traveler information or traffic control systems;
2. crash-avoidance and integration of in-vehicle crash protection technologies;
3. human factors research;
4. integration of intelligent infrastructure, vehicle and control technologies; and,
5. impact of ITS on environmental, weather and natural conditions.

ITS operational tests shall be designed to collect data to permit the objective evaluation of the test results and realize cost-benefit information. The federal share for operational tests and demonstration programs is not to exceed 80%.

Intelligent Transportation System Integration Program (5208) This is the new "deployment incentives". This program requires that US DOT undertake a "comprehensive program to accelerate the integration and interoperability of ITS in metropolitan and rural areas." (The CVO deployment program is described below.) Through competitive bidding, the Secretary is to select projects that improve transportation efficiency, promote safety (including freight movement), increase traffic flow (including intermodal traffic at ports), reduce emissions, or promote tourism.

The Secretary shall give priority to deployment projects that:

1. Contribute to national ITS deployment goals and objectives;
2. Demonstrate a strong commitment to cooperation among agencies, jurisdictions and the private sector;
3. Encourage private sector involvement and financial commitment;



4. Demonstrate a commitment to a comprehensive plan of fully integrated ITS;
5. Are part of approved statewide and metropolitan planning processes and air quality plans;
6. Minimize federal contributions;
7. Ensure long-term operations and maintenance without federal funds;
8. Demonstrate technical capacity for effective operations and maintenance;
9. Mitigate adverse impacts on bicycle and pedestrian safety; and
10. In rural areas, meet other criteria for safety, geographic and regional diversity or economic development.

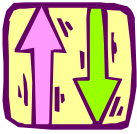
Projects in metropolitan areas are to be used primarily to integrate ITS infrastructure elements that are either deployed or to be deployed with other sources of funds. In rural areas, deployment funds are to be spent for the installation of intelligent transportation infrastructure elements.

There are, however, certain limits on how much funding can go to a single area and how it can be spent. In any fiscal year, not more than \$15 million may be spent in one metropolitan area; not more than \$2 million in any one rural area; and not more than \$35 million in one state. Moreover, at least 10% of the funds authorized under this program must be spent on ITS deployment in rural areas. The federal share payable from ITS program funding is not to exceed 50%. However, the total federal share (ITS plus other federal-aid funds) may go as high as 80%.

Commercial Vehicle ITS Infrastructure Deployment (5209) This is the second part of the new "deployment incentives" program for ITS in TEA 21 and is funded at approximately one-quarter of the metro/rural deployment program described above. The CVO deployment program's purpose is to advance the technical capability of ITS applications for CVO while promoting deployment across the country. These ITS/CVO systems should improve safety and productivity of commercial vehicles and drivers, and reduce CVO administrative costs and regulatory requirements.

This program should give priority to projects that:

1. Encourage multi-state cooperation and corridor development;
2. Improve safety and operations;
3. Increase efficiency of regulatory inspection process;
4. Advance electronic processing of data;
5. Promote communication of data among the states; and



6. Enhance the safe passage of commercial vehicles within the United States and across international borders.

Similar to the metro/rural deployment program, federal ITS funds shall not exceed 50%; total of federal funds limited to no more than 80%. Also, to the maximum extent possible, federal funds are to be used for activities not carried out by private funds and shall be leveraged with non-federal funds.

Use of Funds (5210) This section places certain general restrictions on how ITS funding can be used. First, there is a \$5 million annual limit for outreach and public relations activities. (Training and the publication of research, technical guidance, and the like do not come under this limitation.) Also, ITS funds for operational tests and deployment projects must be used primarily for the development of ITS infrastructure, and not, to the maximum extent possible, the construction of physical highway and transit infrastructure. Last, those applying for ITS funds must to submit an analysis of the life-cycle costs of operations and maintenance, if capital costs exceed \$3 million, and a multi-year financing and operations plan.

For more information or questions, contact Mark Johnson at (202) 484-4582; mjohnson@itsa.org. To access the full bill goto [Http://www.fhwa.dot.gov/tea21/index.htm](http://www.fhwa.dot.gov/tea21/index.htm)

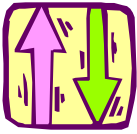
State Funding Sources

SB 45 - Regional Improvement Program Funds

The Governor signed SB 45 (Kopp) on October 3, 1997. SB 45 is the legislation which reforms the programming process for the State Transportation Improvement Program (STIP). The legislation vests increased programming responsibility and discretion with RCTC. The following are the significant changes enacted through SB 45.

The following funding programs have been eliminated with the State funds supporting the programs going to the STIP: State local partnership program; Transit Capital Improvement Program (TCI); Traffic Systems Management Program (TSM); State match for Surface Transportation Program and Congestion Mitigation and Air Quality program (STP/CMAQ). In addition:

The STIP is converted from a 7 year program to a 4 year program. The 1998 STIP is a transition STIP and will be a six year program (1998-99 through 2003-04).



Caltrans administration, operation and maintenance costs, which continue to be taken off of the top of available funds, are now limited to the most recent State Budget Act (1997-98) as adjusted for inflation. (Inflation is not defined in the bill and will probably be a discussion point as the fund estimate moves toward approval)

Caltrans rehabilitation expenditures are limited to the 1997-98 budget act or Caltrans has the option of developing a 10-yr rehabilitation plan to establish what may be assumed to be a larger budget for the program.

Two new programs are created: the Interregional Improvement Program (IIP) and the Regional Improvement Program (RIP) which are described later in this section.

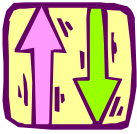
For regional agencies not receiving federal planning funds from their Metropolitan Planning Organization (in our case from SCAG) there is an option to take up to 2% of the Regional Improvement Program (RIP) funds for project planning, programming and monitoring. If regional agencies receive federal planning funds then up to 0.5% can be identified for such purposes.

Federal demonstration funds (federal earmarks) which reduce the amount of federal funds coming to the state will be deducted from the region's Regional Improvement Program (RIP) entitlement.

All project development costs must be programmed on a project by project basis and cost increases over 20% require a STIP amendment. Project development costs can include permits, environmental studies, design/engineering, right of way engineering, construction management.

The legislation imposes specific time lines for the delivery of projects. The basic rule is that a project must be delivered within two years after the year the project is programmed. There is a provision for obtaining a one time extension limited to a maximum of 20 months, and the provision of an extension is at the discretion of the CTC.

The basic intent of the STIP reform legislation is to streamline the STIP development and project delivery process, provide regional agencies increased discretion over transportation funds, establish controls on Caltrans' "off the top" use of the state and federal funds, and improve the efficiency and delivery of STIP projects through the "timely use of funds". Senator Kopp's intent to improve project delivery may result in clean up legislation establishing a use it or lose it clause to motivate regions to deliver projects.



Schedule:

- New fund estimate to be adopted by CTC on January 5, 1998 (CTC has option to postpone for 90 days)
- STIP recommendations due to SCAG by January 10, 1998
- SCAG submits regional program to CTC by March 1, 1998

Prior to SB 45, Caltrans administration, operations and maintenance were taken off the top and the remaining funds were split 70% to regions subject to the north/south split and county minimum formula and 30% was under the discretion of CTC. The 70% funds were made available as “bid pot targets” to regions and the determination of bidding targets was subject to the north/south split as well as the county minimum formula (75% population/25% centerline highway miles)

Under SB 45, Caltrans administration, operations and maintenance continues to be taken off the top but these costs are now limited by the most recent State Budget Act as adjusted for inflation. 75% of the funds are made available to regions (subject to north/south and county minimum formulae) are now identified as county entitlement.

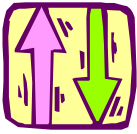
SB 45 creates two new programs, the Interregional Improvement Program (25% of available STIP funds after the off the top deductions) administered by Caltrans and the Regional Improvement Program (75%) over which regions have discretion.

The Regional Improvement Program (RIP, 75%) is available to fund highway capacity improvements, transit, intercity rail, pedestrian and bicycle improvements, grade separations, local roads, transportation demand management (TDM), transportation system management (TSM), safety, soundwalls and administration (up to 2%)

The Interregional Improvement Program (IIP, 25%) is split into two discrete pots of funds with specific requirements for each:

Up to 10% (or 40% of the 25%) can be programmed for projects anywhere in the State subject only to the north/south split which is 60% to the southern counties and 40% to the northern counties. Eligible projects can include state highways, inter-city passenger rail, mass transit guideway or grade separations. Projects for this category of IIP funds are nominated solely by Caltrans.

At least 15% (60% or more of the 25% Interregional Improvement Program) can be programmed for inter-city rail or for interregional road projects. Inter-city rail projects will be nominated



solely by Caltrans and interregional road projects would be nominated by Caltrans and by regions. These funds are not subject to either county minimums or the north/south split. The last caveat is that at least 2.25% (or 15% of the 15% Interregional Improvement Program funds) must be programmed for inter-city rail projects including grade separation projects.

Given the Gualco ruling on the Professional Engineers in California Government (PECG) on the contracting out issue and the recent denial by the State Supreme Court to hear an appeal, it becomes very important to either continue to cultivate a close working relationship with Caltrans to both maximize the amount of projects (funds) which can be programmed for the delivery of projects as well as insure timely project delivery.

All agencies (CTC, Regional Transportation Planning Agencies, Caltrans, etc.) are in the process of working through the initial post-SB 45 process with the development of the 1998 STIP. All guidance to date is interim in nature and clean-up legislation can be expected in 1998-99 which may further impact future STIP development. Please contact your local county transportation commission, Caltrans district office or the California Transportation Commission for the latest information on the SB 45 process.

Petroleum Violation Escrow Account (PVEA)

Under existing Federal law, funds in the Petroleum Violation Escrow Account (PVEA) have been dispersed to the State by the Federal government and deposited in the Federal Trust Fund. PVEA funds have been used in the past to fund statewide programs to relieve traffic congestion, such as vanpool grants and loans. While future proposals could be formulated to provide some funds for implementing suitable corridor projects which might include ITS elements, it should be recognized that PVEA funds are almost exhausted. This, combined with competition from other urban counties will limit PVEA funding availability for ITS Programs in the Central Coast.